UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

CARDIAQ VALVE TECHNOLOGIES, INC.,	*	
Plaintiff,	*	Civil Action No. 14-cv-12405-ADB
v.	*	
NEOVASC INC. and NEOVASC TIARA INC.,	*	
Defendants.	*	

MEMORANDUM AND ORDER

May 27, 2016

BURROUGHS, D.J.

Plaintiff CardiAQ Valve Technologies, Inc. ("CardiAQ") filed this action on June 6, 2014, asserting claims arising out of the alleged misuse of its confidential information and trade secrets by Defendants Neovasc Inc. and Neovasc Tiara Inc. From June 2009 to April 2010, Neovasc Inc. ("Neovasc") worked with CardiAQ to help assemble CardiAQ's transcatheter mitral valve implant ("TMVI") device. In October 2009, in the midst of this business relationship, Neovasc began developing its own TMVI device, which it continues to develop to this day. CardiAQ's complaint alleged that in developing its own TMVI device, Neovasc breached the parties' Non-Disclosure Agreement ("NDA") and misappropriated CardiAQ's trade secrets. The complaint further alleged that Neovasc's development of its own TMVI device breached the implied covenant of good faith and fair dealing, violated Mass. Gen. Laws. Ch. 93A ("Chapter 93A"), and constituted fraud. In addition, CardiAQ brought a claim for correction of inventorship under 35 U.S.C. § 256, requesting that its two co-founders be added as inventors of Neovasc's U.S. Patent No. 8,579,964 (the "'964 Patent").

On May 19, 2016, following a 12-day trial, a jury returned a verdict in favor of CardiAQ for $70,000,000. [ECF No. 483]. Specifically, the jury found that Neovasc (1) breached the NDA; (2) breached the duty of honest performance in the NDA; and (3) misappropriated three of the CardiAQ's six identified trade secrets. Id. The jury awarded CardiAQ zero damages on the contract claims and $70,000,000 on the trade secret claims. Id. The Court reserved two counts—violation of Chapter 93A and correction of inventorship—for itself, but gave the jury advisory questions with respect to each count: first, the jury found that CardiAQ proved by a preponderance of the evidence that Neovasc had engaged in unfair or deceptive acts or practices and second, the jury found that CardiAQ proved by clear and convincing evidence that CardiAQ's two founders contributed to the conception of the '964 Patent. Id. [1]

This Memorandum and Order resolves CardiAQ's Chapter 93A claim. On May 17, 2016, before the case was submitted to the jury, Neovasc filed a Motion for Judgment as a Matter of Law on CardiAQ's Chapter 93A claim [ECF No. 473], in which it argued that CardiAQ had not shown that Neovasc's alleged wrongful acts took place "primarily and substantially within the commonwealth" of Massachusetts, as is required under the statute. Mass. Gen. Laws Ch. 93A, § 11. As explained further below, the Court agrees: because essentially all of Neovasc's actionable conduct took place in Canada and not Massachusetts, Neovasc cannot be held liable under Chapter 93A.

This Order does not address CardiAQ's correction of inventorship claim. The parties will be directed to file proposed findings of fact and conclusions of law regarding the correction of

[1] On April 25, 2016, the Court granted Neovasc summary judgment on the fraud count. [ECF No. 417].

inventorship claim on a date to be determined at the June 3, 2016 injunction hearing, after which the Court will resolve the inventorship claim and enter a final judgment in this matter.

I. Factual Findings

Below is a summary of facts adduced at trial that are relevant to CardiAQ's Chapter 93A claim.

Both defendants—Neovasc Inc. and Neovasc Tiara Inc.—are Canadian corporations based in Richmond, British Columbia, Canada. [ECF No. 64 ¶¶ 6-7]. CardiAQ is a Delaware corporation that maintained its principal place of business in Winchester, Massachusetts until February 2010, after which it moved to Orange County, California. [ECF No. 64 ¶ 5]. The parties' business relationship began on June 4, 2009, after Brian McPherson, the Vice President of Operations and President of the Surgical Products division at Neovasc, sent an unsolicited email to CardiAQ co-founder Brent Ratz advertising Neovasc's products and services. [Tr. Day 3, 183:7-20; Tr. Ex. 349]. That day, the parties entered into the NDA, governed by British Canadian law, in which they agreed that the recipient of "Confidential Information"[2] would not use or disclose such information for "any purpose other than evaluating the proposed business relationship." [Tr. Ex. 371]. The NDA was executed via email and signed by Mr. Ratz and Neovasc CEO Alexei Marco. [Tr. Day 3, 188:1-14; Tr. Ex. 371].

[2] Confidential Information is defined in the NDA as "any oral or written information received from the Discloser which is not generally known to the public .... Confidential Information includes, by way of example and not limitation, information of a technical sense such as trade secrets; manufacturing processes or devices; current products or products under development; research subjects; methods and results; matters of a business nature such as information about cost, margins, pricing policies, markets, sales, suppliers and customers; product, marketing or strategic plans; financial information; personnel records and other information of a similar nature." [Tr. Ex. 371].

At the time Mr. McPherson reached out to CardiAQ, CardiAQ was a start-up developing a TMVI device, a prosthetic heart valve delivered through a catheter to replace a malfunctioning native mitral valve without requiring open heart surgery. CardiAQ's TMVI device consisted of three elements: the frame, the delivery catheter, and the tissue valve. [Tr. Day 3, 15:20-23]. Between June 2009 and April 2010, Neovasc worked with CardiAQ to manufacture the tissue valve element. [Tr. Day 3, 16:1-3]. CardiAQ would send metal frames to Neovasc's Vancouver facility [Tr. Day 4, 36:15-37:2; Tr. Ex. 1205], and Neovasc would attach tissue to the frame and assemble the final TMVI prototype. [Tr. Day 3, 24:23-25:2; Tr. Day 3, 35:1-2; Tr. Day 4, 26:1-2]. CardiAQ used the prototypes assembled by Neovasc for several animal studies. [Tr. Day 3, 25:3-9; Tr. Day 4, 48:10-12].

Over the course of the 10-month relationship, Mr. Ratz (based in Massachusetts) regularly exchanged emails and phone calls with Neovasc employees (based in Canada). Through these emails and phone calls, Neovasc employees, including engineer Randy Lane, learned about the specifications, ongoing testing, and development history of CardiAQ's TMVI device. [See e.g., Exs. 1171; 1179; 1193; 1197; 1214]. The parties met in person on at least two occasions. First, on June 23, 2009, CardiAQ co-founder Dr. Arshad Quadri met with several Neovasc employees at their Vancouver facility to discuss the development of CardiAQ's device. [Tr. Day 3, 17:5-19:4]. Second, in September 2009, Mr. Ratz spoke to Neovasc employees at the 2009 TCT Conference in San Francisco. [Tr. Day 4, 12:24-13:5]. There was no evidence at trial that anyone from Neovasc ever visited CardiAQ in Massachusetts.

Neovasc and CardiAQ's business relationship ended in April 2010, after CardiAQ leased its own manufacturing facility in California and no longer needed Neovasc's services. [Tr. Day 4, 46:9-16; Tr. Day 7, 119:14-25; Day 9, 107:19-21].

On October 20, 2009, in the middle of CardiAQ and Neovasc's business relationship, Mr. Lane drew the first sketch of what would become Neovasc's own TMVI device, now known as the "Tiara." [Tr. Day 8, 99:10-12; Day 9, 67:9-17; Tr. Ex. 1121]. After sketching the concept in his lab notebook, Mr. Lane told Neovasc's CEO Alexi Marko about the idea [Tr. Day 8, 100:11-21], and Mr. Marko instructed Mr. Lane to proceed with an in-house mitral valve program, which he did. [Tr. Ex. 343; Tr. Day 8, 122:9-123:11]. Until Neovasc's relationship with CardiAQ ended in April 2010, Mr. Lane worked on both Neovasc's internal TMVI project and CardiAQ's valve assembly. [Tr. Day 9, 113:10-19]. Neovasc did not place any restrictions on its engineers from working on both the Tiara project and the CardiAQ project. [Tr. Day 9, 113:14-24].

In December 2009, Neovasc began to prepare its first patent application relating to the Tiara design. [Tr. Day 9, 107:23-108:5]. Neovasc filed the application on May 5, 2010 [Tr. Day 9, 107:23-25], naming Mr. Lane as the sole inventor. [Tr. Ex. 2756]. The mailing address for the application was a Canadian address, and the application stated that Mr. Lane was from Langley, Canada. Id. The U.S. Patent Office issued the '964 Patent on November 12, 2013, naming Mr. Lane and Colin Nyuli, another Neovasc employee, as joint inventors. [Tr. Ex. 115]. The '964 Patent is a method patent for a transcatheter mitral valve prosthesis, with several features similar to CardiAQ's TMVI device. Id.

Neovasc formally announced its internal TMVI project in a June 20, 2011 press release. [Tr. Ex. 347; Day 9, 206:11-17]. Since then, Neovasc's device has been implanted in over 100 animals. [Tr. Ex. 2533 at 57]. On February 3, 2014, Neovasc announced the first in-human implantation of its device by physicians at St. Paul's Hospital in Vancouver. [Tr. Ex. 2315].

Neovasc never told CardiAQ about its internal TMVI program. [Tr. Day 4, 51:14-18; Tr. Day 9, 112:23-113:1]. Mr. Ratz and Dr. Quadri first learned of Neovasc's development of a TMVI device in December 2011, after Neovasc's patent application became public. [Tr. Day 3, 68:2-23; Day 4, 51:19-25]. Soon thereafter, in February 2012, counsel for CardiAQ contacted Mr. Marko to express concern that Neovasc may have incorporated CardiAQ's confidential information into its Tiara device, in violation of the NDA. [Tr. Ex. 1389]. In June 2014, after counsel for the parties exchanged multiple letters [see e.g., Tr. Exs. 188, 1272, 2482], CardiAQ filed the instant action.

II. Analysis

Chapter 93A prohibits "unfair methods of competition and unfair or deceptive acts or practices in the conduct of any trade or commerce." Mass. Gen. Laws. ch. 93A, § 2(a). Because CardiAQ is a business engaged in commerce, its claim arises under Section 11 and not Section 9 of Chapter 93A. See Cont'l Ins. Co. v. Bahnan, 216 F.3d 150, 156 (1st Cir. 2000) (noting that "section 11 entitles '[a]ny person who engages in the conduct of any trade or commerce' to bring an action for unfair or deceptive practices, whereas section 9 grants essentially the same entitlement to aggrieved consumers."); Lantner v. Carson, 374 Mass. 606, 610 (1978) ("[W]here § 9 affords a private remedy to the individual consumer who suffers a loss as a result of the use of an unfair or deceptive act or practice, an entirely different section, § 11, extends the same remedy to 'any person who engages in the conduct of any trade or commerce.'"). Under Section 11, the unfair or deceptive acts must occur "primarily and substantially within the Commonwealth." Mass. Gen. Laws ch. 93A, § 11. The defendant bears the burden of showing that the unfair or deceptive act did not occur primarily and substantially in Massachusetts. Id.; see Roche v. Royal Bank of Canada, 109 F.3d 820, 829 (1st Cir. 1997) ("Contrary to the

standard burden of proof on jurisdictional questions, here the burden is on *defendants* to show that their misconduct occurred primarily and substantially *outside* Massachusetts. . . . This is because § 11 provides an exemption from 93A liability, available as a defense, rather than a jurisdictional prerequisite to suit.") (internal quotations and citations omitted) (emphasis in original).

"[W]hether the actions and transactions constituting the § 11 claim occurred primarily and substantially within the commonwealth is not a determination that can be reduced to any precise formula." Kuwaiti Danish Computer Co. v. Digital Equip. Corp., 438 Mass. 459, 472 (2003). In making this determination, courts, after making findings of fact, "determine whether the center of gravity of the circumstances that give rise to the claim is primarily and substantially within the Commonwealth." Id. at 473. This inquiry "focuses solely on the actionable conduct said to give rise to the violation; other conduct, no matter where it takes place, may not be considered on the question." Spring Investor Servs., Inc. v. Carrington Capital Mgmt., LLC, No. CIV.A. 10-10166-FDS, 2013 WL 1703890, at *12 (D. Mass. Mar. 28, 2013); see also ADA Sols., Inc. v. Meadors, 98 F. Supp. 3d 240, 267 (D. Mass. 2015) ("In assessing the locus of the conduct, the inquiry is limited to that conduct which is said to give rise to the violation."); Pine Polly, Inc. v. Integrated Packaging Films IPF, Inc., No. CIV.A. 13-11302-NMG, 2014 WL 1203106, at *7-8 (D. Mass. Mar. 19, 2014) ("The center of gravity inquiry examines the actionable conduct as opposed to conduct that is neither unfair nor deceptive."). Accordingly, if the plaintiff is harmed in Massachusetts, but all of the actionable unfair or deceptive conduct occurred elsewhere, a Chapter 93A claim cannot stand. See ADA Sols., Inc., 98 F. Supp. 3d at 267 (D. Mass. 2015) (granting summary judgment on Chapter 93A claim where "the only connection to Massachusetts is that it is where the aggrieved party (ADA) is based and where it

may have suffered harm"); Spring Investor Servs., Inc., 2013 WL 1703890, at *13 ("As many courts have previously held, a place of injury within Massachusetts is not a sufficient basis for finding that conduct occurred 'primarily and substantially' within the Commonwealth."); Korpacz v. Women's Prof'l Football League, No. CIV.A. 04-10735-RWZ, 2006 WL 220762, at *5 (D. Mass. Jan. 27, 2006) (granting defendants summary judgment on Chapter 93A claim because "[a]lthough plaintiffs themselves reside in Massachusetts and any losses they may have suffered would have been incurred [in Massachusetts], defendants' conduct occurred outside of the state"); see also Garshman Co. v. Gen. Elec. Co., 176 F.3d 1, 7 (1st Cir. 1999) ("The place of injury is not determinative; otherwise in almost every case with a Massachusetts plaintiff the defendant would be subject to Chapter 93A violations, regardless of how negligible the defendant's activity in Massachusetts was.").

Given the factual findings described above, CardiAQ's Chapter 93A claim fails as a matter of law; Massachusetts was not the center of gravity of the circumstances giving rise to CardiAQ's Chapter 93A claim. Considering the jury's verdict, any unfair or deceptive conduct by Neovasc would be some combination of Neovasc's breach of the NDA and its misappropriation of trade secrets.[3] The locus of this conduct was Canada. At trial, CardiAQ did not identify any actionable conduct by Neovasc that occurred in Massachusetts. Throughout the relevant time period, Neovasc was headquartered in Canada. Neovasc received CardiAQ's confidential information and trade secrets while in Canada, worked on CardiAQ's prototypes

[3] See NExTT Sols., LLC v. XOS Techs., Inc., 113 F. Supp. 3d 450, 460 (D. Mass. 2015) ("Typically, a mere breach of contract, without more, does not amount to a Chapter 93A violation but a knowing violation of a contractual obligation for the purpose of securing unwarranted benefits can."); Scansoft, Inc. v. Voice Signal Techs., Inc., No. 1:04-CV-10353, 2005 WL 6719813, at *6 (D. Mass. Jan. 20, 2005) ("The standards for finding misappropriation of a trade secret provide the criteria for finding an unfair or deceptive act under Chapter 93A.") (quotingPrescott v. Morton International, Inc., 769 F. Supp. 404, 407 (D. Mass.1990)).

from its facility in Canada, and developed its competing device in Canada. Though the underlying confidential information and trade secrets were developed by CardiAQ while it was located in Massachusetts, Neovasc's misuse and misappropriation of that information occurred outside of the state.[4] Further, because CardiAQ moved to California in February 2010, it is not even clear that CardiAQ experienced all of the harm within Massachusetts.

"If the significant contacts of the competing jurisdictions are approximately in the balance, the conduct in question cannot be said to have occurred primarily and substantially in Massachusetts." Uncle Henry's Inc. v. Plaut Consulting Co., 399 F.3d 33, 45 (1st Cir. 2005). Here, rather than being in balance, the contacts outside of Massachusetts predominate. Accordingly, Neovasc's Chapter 93A claim fails as a matter of law. See Kenda Corp. v. Pot O'Gold Money Leagues, Inc., 329 F.3d 216, 236 (1st Cir. 2003) ("[W]hen 'virtually all the conduct that can be said to be unfair or deceptive' occurs outside the Commonwealth, there can be no Chapter 93A liability.") (quoting Kuwaiti, 781 N.E.2d at 800).

III. Conclusion

For the reasons stated herein, the Court grants Neovasc's Motion for Judgment as a Matter of Law on CardiAQ's Chapter 93A claim. [ECF No. 473]. Neovasc has met its burden of showing that its allegedly unfair or deceptive conduct did not occur primarily and substantially in Massachusetts.

SO ORDERED.

Dated: May 27, 2016

/s/ Allison D. Burroughs
ALLISON D. BURROUGHS
U.S. DISTRICT COURT JUDGE

[4] Neovasc's device is not on the market and therefore has not been used or sold in Massachusetts.